Forwarding References Exercises

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Nested References

- Is it possible to create a reference to a reference?
- Write a simple program to illustrate your answer

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Reference Collapsing Rules

- What is meant by "reference collapsing"?
- What rules are used for reference collapsing in Modern C++?

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&& Argument Parameters

- What is the effect of putting "&&" after an argument of specific type?

```
func(X&& x);
```

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&& Template Argument Parameters

- In a template function, what effect does putting "&&" after a template parameter argument have?

```
template <typename T>
func(T&& x);
```

- Write a simple program to demonstrate that a function with a forwarding reference argument can be called with either an lvalue or an rvalue

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Template Argument Deduction

- Consider this function with an argument which is a forwarding reference

```
template <typename T>
func(T&& x);
```

- What will be the prototype of the instantiated function if it is called with
  - An lvalue object of class Test
  - An rvalue object of class Test
  - (For simplicity, assume that the instantiated function has the same name)

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